



# Ohio State University Horticulture and Crop Science

## Pest Description

**Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** LAMAM *Lamium amplexicaule*  
**Common Name:** Henbit

**Pest 4 Type:** W **Code:** LEPVI *Lepidium virginicum*  
**Common Name:** Virginia pepperweed

**Pest 5 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Canada horseweed

**Pest 6 Type:** W **Code:** SONAR *Sonchus arvensis*  
**Common Name:** Perennial sowthistle

**Pest 7 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion

**Pest 8 Type:** W **Code:** CAPBP *Capsella bursa-pastoris*  
**Common Name:** Shepherd's purse

**Pest 9 Type:** W **Code:** AMBEL *Ambrosia artemisiifolia*  
**Common Name:** Common ragweed

**Pest10 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest11 Type:** W **Code:** VERAG *Veronica agrestis*  
**Common Name:** Field speedwell

**Pest12 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest13 Type:** W **Code:** RUMCR *Rumex crispus*  
**Common Name:** Curly dock

**Pest14 Type:** W **Code:** POLPY *Polygonum pensylvanicum*  
**Common Name:** Pennsylvania smartweed

**Pest15 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest16 Type:** W **Code:** AMARE *Amaranthus retroflexus*  
**Common Name:** Redroot pigweed

## Site and Design

**Plot Width, Unit:** 6.67 FT  
**Plot Length, Unit:** 30 FT  
**Plot Area, Unit:** 200.1 FT<sup>2</sup>  
**Replications:** 3

**Site Type:** FIELD field  
**Experimental Unit:** 1 PLOT plot  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)  
**Untreated Arrangement:** INCLUDED single control randomized in each block

## Soil Description

**Description Name:** F-9 East  
**% OM:** 2.8 **Texture:** SICL silty clay loam  
**pH:** 5.7 **Soil Name:** Kokomo  
**CEC:** 21 **Fert. Level:** G good  
**Soil Drainage:** G good

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## Application Description

	A	B	C
Application Date:	4/7/10	4/14/10	6/7/10
Time of Day:	9:00 A.M.	10:00 A.M	11:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	21 EPP	14 EEPP	POST
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	REEB		
Air Temperature, Unit:	67 F	55 F	73.3 F
% Relative Humidity:	54	54	78.8
Wind Velocity, Unit:	12 MPH	6 MPH	4.5 MPH
Wind Direction:	S	E	W
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	53 F	50 F	64 F
Soil Moisture:	SLIWET	SLIDRY	WET
% Cloud Cover:	75	2	70
Next Rain Occurred On:	7/8/10	4/24/10	6/8/10

## Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	BBCH		
Stage Majority, Percent:	18		100
Height, Unit:	18		IN
Height Minimum, Maximum:	16		20

## Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	STEME W	STEME W	STEME W
Stage Majority, Percent:	19 100	19 100	
Stage Minimum, Percent:	19 100		
Stage Maximum, Percent:	19 100		
Diameter, Unit:	6 IN	10 IN	
Height, Unit:	2 IN	2 IN	
Height Minimum, Maximum:	2 2	1 2	
Density, Unit:	4 M2	4 M2	
Pest 2 Code, Type, Scale:	LAMPU W	LAMPU W	LAMPU W
Stage Majority, Percent:	19 100	19 100	
Stage Minimum, Percent:	19 100		
Stage Maximum, Percent:	19 100		
Diameter, Unit:	3 IN	4 IN	
Height, Unit:	3 IN	6 IN	
Height Minimum, Maximum:	2 3	5 6	
Density, Unit:	3 M2	3 M2	
Pest 3 Code, Type, Scale:	LAMAM W	LAMAM W	LAMAM W
Stage Majority, Percent:	19 100	19 100	
Stage Minimum, Percent:	19 100		
Stage Maximum, Percent:	19 100		
Diameter, Unit:	4 IN	5 IN	
Height, Unit:	3 IN	4 IN	
Height Minimum, Maximum:	2 3	4 4	
Density, Unit:	0.33 M2	0.33 M2	
Pest 4 Code, Type, Scale:	LEPVI W	LEPVI W	LEPVI W
Stage Majority, Percent:	19 100	19 100	
Diameter, Unit:	4 IN	6 IN	
Height, Unit:	10 IN	20 IN	
Height Minimum, Maximum:	8 12	18 20	
Density, Unit:	0.01 M2	0.01 M2	
Pest 5 Code, Type, Scale:	ERICA W	ERICA W	ERICA W
Stage Majority, Percent:	19 100	19 100	19 100
Diameter, Unit:	2 IN	2 IN	
Height, Unit:	2 IN	3 IN	15 IN
Height Minimum, Maximum:	1 2	2 3	4 26
Density, Unit:	4 M2	4 M2	3 M2
Pest 6 Code, Type, Scale:	SONAR W	SONAR W	SONAR W
Stage Majority, Percent:	19 100	19 100	
Diameter, Unit:	4 IN	9 IN	
Height, Unit:	2 IN	5 IN	
Height Minimum, Maximum:	2 3	4 5	
Density, Unit:	2 M2	2 M2	
Pest 7 Code, Type, Scale:	TAROF W	TAROF W	TAROF W
Stage Majority, Percent:	19 100	19 100	19 100
Diameter, Unit:		12 IN	
Height, Unit:		6 IN	7 IN
Height Minimum, Maximum:		5 6	6 8
Density, Unit:		0.3 M2	0.3 M2
Pest 8 Code, Type, Scale:	CAPBP W	CAPBP W	CAPBP W
Stage Majority, Percent:	19 100	19 100	

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Diameter, Unit:	4	IN		
Height, Unit:	14	IN		
Height Minimum, Maximum:	12	16		
Density, Unit:	1	M2		
Pest 9 Code, Type, Scale:	AMBEL	W	AMBEL	W
Stage Majority, Percent:	12	100	19	100
Diameter, Unit:	1	IN		
Height, Unit:	0.5	IN	10	IN
Height Minimum, Maximum:	0.15	0.5	2	14
Density, Unit:	0.33	M2	0.33	M2
Pest10 Code, Type, Scale:	AMBTR	W	AMBTR	W
Stage Majority, Percent:	12	100	19	100
Diameter, Unit:	1	IN		
Height, Unit:	0.5	IN	20	IN
Height Minimum, Maximum:	0.25	0.5	2	30
Density, Unit:	3	M2	3	M2
Pest11 Code, Type, Scale:	VERAG	W	VERAG	W
Stage Majority, Percent:	19	100		
Diameter, Unit:	10	IN		
Height, Unit:	3	IN		
Height Minimum, Maximum:	1	3		
Density, Unit:	0.33	M2		
Pest12 Code, Type, Scale:	SETFA	W	SETFA	W
Stage Majority, Percent:			16	100
Height, Unit:			6	IN
Height Minimum, Maximum:			2	8
Density, Unit:			85	M2
Pest13 Code, Type, Scale:	RUMCR	W	RUMCR	W
Stage Majority, Percent:			18	100
Height, Unit:			14	IN
Height Minimum, Maximum:			12	16
Density, Unit:			0.3	M2
Pest14 Code, Type, Scale:	POLPY	W	POLPY	W
Stage Majority, Percent:			15	100
Height, Unit:			6	IN
Height Minimum, Maximum:			4	8
Pest15 Code, Type, Scale:	CHEAL	W	CHEAL	W
Stage Majority, Percent:			17	100
Height, Unit:			15	IN
Height Minimum, Maximum:			2	20
Density, Unit:			8	M2
Pest16 Code, Type, Scale:	AMARE	W	AMARE	W
Stage Majority, Percent:			14	100
Height, Unit:			6	IN
Height Minimum, Maximum:			4	8
Density, Unit:			0.25	M2

### Application Equipment

	A	B	C
Appl. Equipment:	6 foot boom	6 foot boom	6 foot boom
Equipment Type:	SPRBAC	SPRBAC	SPRBAC
Operating Pressure, Unit:	53 PSI	53 PSI	53 PSI
Nozzle Type:	TEEJET DG	TEEJET DG	TEEJET DG
Nozzle Size:	8002	8002	8002
Nozzle Spacing, Unit:	18 IN	18 IN	18 IN
Boom Length, Unit:	6 FT	6 FT	6 FT
Boom Height, Unit:	20 IN	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA
Mix Size, Unit:	0.33 Gallons	0.33 Gallons	0.33 Gallons
Propellant:	CO2	CO2	CO2



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Pest Code	STEME	LAMPU	CAPBP	TAROF	VERAG	SONAR	ERICA	STEME							
Rating Date	4/27/10	4/27/10	4/27/10	4/27/10	4/27/10	4/27/10	4/27/10	5/12/10							
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN							
Rating Unit	%	%	%	%	%	%	%	%							
Trt-Eval Interval	13 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B	28 DA-B							
Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit	Code	1	2	3	4	5	6	7	8	9
LSD (P=.05)							32.4	14.9	39.8	27.5	13.7	37.3	31.6	0.00	12.8
Standard Deviation							19.2	8.9	22.8	16.1	7.8	20.5	18.0	0.00	7.6
CV							43.79	23.88	47.19	38.58	23.1	38.48	31.1	0.0	8.41
Bartlett's X2							17.057	6.389	12.728	2.972	1.515	6.647	5.343	0.0	8.702
P(Bartlett's X2)							0.106	0.782	0.122	0.965	0.911	0.467	0.501	.	0.122
Replicate F							1.222	1.721	0.010	0.646	0.095	0.097	1.469	0.000	1.241
Replicate Prob(F)							0.3132	0.1994	0.9897	0.5345	0.9095	0.9085	0.2636	1.0000	0.3064
Treatment F							8.989	39.952	8.603	10.641	71.418	7.232	9.516	0.000	35.941
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001	0.0018	0.0001	1.0000	0.0001



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Pest Code	LAMPU	CAPBP	TAROF	VERAG	SONAR	ERICA	STEME	LAMPU	CAPBP					
Rating Date	5/12/10	5/12/10	5/12/10	5/12/10	5/12/10	5/12/10	5/24/10	5/24/10	5/24/10					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%	%	%	%	%					
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B	40 DA-B	40 DA-B	40 DA-B					
Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	10	11	12	13	14	15	16	17	18
LSD (P=.05)						11.2	0.0	19.0	25.6	20.8	19.0	8.5	16.0	0.0
Standard Deviation						6.6	0.0	11.3	14.2	12.2	11.3	5.0	9.5	0.0
CV						7.59	0.0	14.2	15.57	14.37	13.42	5.47	10.68	0.0
Bartlett's X2						4.711	0.0	16.667	0.0	8.809	8.186	2.007	4.425	0.0
P(Bartlett's X2)						0.695	.	0.118	.	0.267	0.316	0.157	0.035*	.
Replicate F						1.382	0.000	1.269	0.423	1.510	1.374	0.755	1.159	0.000
Replicate Prob(F)						0.2697	1.0000	0.2986	0.6652	0.2463	0.2715	0.4806	0.3301	1.0000
Treatment F						46.560	0.000	15.070	10.675	14.867	16.305	83.961	27.621	0.000
Treatment Prob(F)						0.0001	1.0000	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	1.0000







## Ohio State University Horticulture and Crop Science

Pest Code		ERICA		SONAR		TAROF		
Rating Date		6/7/10		6/7/10		6/7/10		
Rating Type		CONTRO		CONTRO		CONTRO		
Rating Unit		%		%		%		
Trt-Eval Interval		0 DA-C		0 DA-C		0 DA-C		
Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	28	29	30
1	UTC					0	0	0
2	Corvus	2.63	5.6 oz/a		B	100	100	72
	2 Atrazine	4	2 pt/a					
	2 COC	100	0.8 qt/a					
3	Corvus	2.63	5.6 oz/a		B	100	100	100
	3 2,4-D Ester	4	1 pt/a					
	3 COC	100	0.8 qt/a					
4	Corvus	2.63	5.6 oz/a		B	100	100	100
	4 Roundup PowerMax	4.5	22 oz/a					
5	Corvus	2.63	5.6 oz/a		B	77	75	77
	5 Laudis	3.5	1 oz/a					
	5 COC	100	0.8 qt/a					
6	Corvus	2.63	5.6 oz/a		B	100	100	73
	6 Clarity	4	4 oz/a					
	6 COC	100	0.8 qt/a					
7	Corvus	2.63	5.6 oz/a		B	67	100	62
	7 Cadet	10	0.4 oz/a					
	7 COC	100	0.8 qt/a					
8	Capreno	3.46	3 oz/a		B	90	100	73
	8 Roundup PowerMax	4.5	11 oz/a					
	8 COC	100	0.8 qt/a					
9	Balance Flexx	2	2 oz/a		B	47	70	37
	9 Capreno	3.46	2 oz/a					
	9 COC	100	0.8 qt/a					
10	Corvus	2.63	5.6 oz/a		B	100	100	90
	10 Ignite	2.34	22 oz/a					
11	Ignite	2.34	22 oz/a			63	30	100
	11 Sharpen	2.85	1 oz/a					
12	Corvus	2.63	5.6 oz/a		B	80	80	42
	12 Sharpen	2.85	1 oz/a					
	12 COC	100	0.8 qt/a					
13	Surestart	4.25	3 pt/a		A	100	100	100
	13 Durango DMA	4	24 oz/a					
	13 2,4-D Amine	4	1 pt/a					
	13 N-PAK AMS	100	2 qt/a					
	13 Durango DMA	4	24 oz/a		C			
	13 N-PAK AMS	100	2 qt/a					
14	Surestart	4.25	3 pt/a		A	100	100	70
	14 Atrazine	4	2 pt/a					
	14 Durango DMA	4	24 oz/a					
	14 2,4-D Amine	4	1 pt/a					
	14 N-PAK AMS	100	2 qt/a					
	14 Durango DMA	4	24 oz/a		C			
	14 N-PAK AMS	100	2 qt/a					

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Pest Code	ERICA			SONAR			TAROF		
Rating Date	6/7/10			6/7/10			6/7/10		
Rating Type	CONTRO			CONTRO			CONTRO		
Rating Unit	%			%			%		
Trt-Eval Interval	0 DA-C			0 DA-C			0 DA-C		
Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	28	29	30	
LSD (P=.05)						28.1	19.1	25.7	
Standard Deviation						16.7	11.3	15.0	
CV						20.82	13.68	21.16	
Bartlett's X2						1.667	0.973	12.797	
P(Bartlett's X2)						0.893	0.324	0.119	
Replicate F						0.162	1.066	0.270	
Replicate Prob(F)						0.8510	0.3608	0.7666	
Treatment F						8.991	22.723	11.173	
Treatment Prob(F)						0.0001	0.0001	0.0001	

# Ohio State University Horticulture and Crop Science

## Covus, Capreno Burndown Efficacy

Title No. 2:

Trial ID: 10NTC1

Location: Western Branch F-9 E

Project ID:

Protocol ID: 10NTC1

Study Director: Anthony F. Dobbels

Investigator: Dr. Mark M. Loux

Sponsor Contact: Dave Lamore, Bayer CropScience

### Pest Code

STEME, Stellaria media, = US

LAMPU, Lamium purpureum, = US

CAPBP, Capsella bursa-pastoris, = US

TAROF, Taraxacum officinale, = US

VERAG, Veronica agrestis, = US

SONAR, Sonchus arvensis, = US

ERICA, Conyza canadensis, = US

AMBTR, Ambrosia trifida, = US

SETFA, Setaria faberi, = US

AMBEL, Ambrosia artemisiifolia, = US

CHEAL, Chenopodium album, = US

### Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

### Rating Unit

% = percent